

Carolyn M. Carlson
DaimlerChrysler Corporation
New Castle Machining & Forge Plant
1817 "I" Avenue
New Castle, Indiana 47362

Re: **MPR 065-12960-00001**
First Minor Revision to
FESOP 065-5619-00001

Dear Ms. Carlson:

DaimlerChrysler Corporation was issued a permit on December 11, 1996 for an automobile chassis manufacturing source. A letter requesting changes to this permit was received on November 16, 2000. Pursuant to the provisions of 326 IAC 2-8-11.1, a minor permit revision to this permit is hereby approved as described in the attached Technical Support Document.

The modification consists of construction, relocation, replacement and operation of the following emission units:

- (a) Seventy-seven (77) wet machines, consisting of forty (40) wet machines at 1,000 actual cubic feet per minute and thirty-seven (37) wet machines at 2,000 actual cubic feet per minute, exhausted in the building, to be installed in 2001, capacity: 0.11 gallons of machining fluid per hour each, throughput capacity: 3,000 pounds of automotive parts per hour (deemed insignificant activities).
- (b) One (1) heat treat furnace (replacing a similar furnace), to be installed in 2001, exhaust to a stack, capacity: 0.147 gallons of oil per hour, throughput capacity: 3,000 pounds of automotive parts per hour (deemed insignificant activity).
- (c) Twenty-nine (29) parts washers, capacity: 0.2 gallons of washer fluids per hour, total (deemed insignificant activities).
- (d) Natural gas combustion units, each rated at less than ten (10) million British thermal units per hour, total rated at 23.6 million British thermal units per hour (deemed insignificant activities).

In addition, the following existing facilities are being relocated within the source as minor physical changes as defined in 326 IAC 2-1.1-1(6) pursuant 326 IAC 2-1.1-3(g)(2):

- (e) Three (3) heat treat furnaces,
- (f) One (1) shot blast unit,
- (g) Four (4) atmosphere generators,
- (h) Four (4) laser welders,
- (i) Thirty-three (33) wet machines, and

- (j) Twenty (20) parts washers.

The following construction conditions are applicable to the proposed project:

1. General Construction Conditions
The data and information supplied with the application shall be considered part of this source modification approval. Prior to any proposed change in construction which may affect the potential to emit (PTE) of the proposed project, the change must be approved by the Office of Air Management (OAM).
2. This approval to construct does not relieve the permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.
3. Effective Date of the Permit
Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.
4. Pursuant to 326 IAC 2-1.1-9 (Revocation), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.
5. All requirements and conditions of this construction approval shall remain in effect unless modified in a manner consistent with procedures established pursuant to 326 IAC 2.

Pursuant to 326 IAC 2-8-11.1, this permit shall be revised by incorporating the minor permit revision into the permit. All other conditions of the permit shall remain unchanged and in effect. Please attach a copy of this modification and the following revised permit pages to the front of the original permit.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Mark L. Kramer, c/o OAM, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, at 631-691-3395 or in Indiana at 1-800-451-6027 (ext 631-691-3395).

Sincerely,

Paul Dubenetzky, Chief
Permits Branch
Office of Air Management

Attachments
MLK/MES

cc: File - Henry County
U.S. EPA, Region V
Henry County Health Department
Air Compliance Section Inspector - Warren Greiling
Compliance Data Section - Mendy Jones
Administrative and Development - Janet Mobley
Technical Support and Modeling - Michele Boner

**FEDERALLY ENFORCEABLE STATE
OPERATING PERMIT (FESOP)
OFFICE OF AIR MANAGEMENT**

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015
Phone: 1-800-451-6027

**Daimler Chrysler Corporation - New Castle Machining & Forge Plant
1817 "I" Avenue
New Castle, Indiana 47362**

Daimler Chrysler Corporation - New Castle Machining & Forge Plant is hereby authorized to operate subject to the conditions contained herein, the facilities listed in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 and contains the conditions and provisions specified in 326 IAC 2-8 and 40 CFR Part 70.6 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments) and IC 13-15 and IC 13-17 (prior to July 1, 1996, IC 13-1-1-4 and IC 13-7-10).

Operation Permit No.: F 065-5619-00001	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date: December 11, 1996
First Significant Permit Revision No.: SPR 065-11005, issued October 7, 1999	
First Administrative Amendment No.: AAF 065-12797, issued November 9, 2000	
First Minor Permit Revision No.: MPR 065-12960	
Pages Affected: 6, 29a, b and c	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date:

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- u) Asbestos abatement projects regulated by 326 IAC 14-10.
- v) Purging of gas lines and vessels that is related to routine maintenance and repair of buildings, structures, or vehicles at the source where air emissions from those activities would not be associated with any production process.
- w) Equipment used to collect any material that might be released during a malfunction, process upset, or spill cleanup, including catch tanks, temporary liquid separators, tanks, and fluid handling equipment.
- x) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower.
- y) Stationary fire pumps.
- z) Grinding and machining operations controller with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4,000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; and woodworking operations.
- aa) Various waterbased parts washers (approximately 59 individual units) are utilized throughout the facility. The individual potential to emit (PTE) for glycol ethers is approximately 0.1 pounds per day. The combined PTE for glycol ethers is approximately 5.2 pounds per day.
- bb) Lead die cast operation (N-13), associated with die repair.
- cc) Shift tube adhesive operation (N-19).
- dd) Lime silo (N-28), associated with the onsite WWTP.
- ee) Parts marking (N-30) occurs at numerous locations around the plant.
- ff) Various water based parts washers, approximately 30 units (N-41), are used throughout the plant.
- gg) Forge/press shop QA/QC grinders (N-56 and N-57).
- hh) Plant grinder, a single, free-standing unit located on the plant floor (N-59).
- ii) Wet type machining operations.

A.4 FESOP Applicability [326 IAC 2-8-2]

This stationary source, required to have a Part 70 permit as described in 326 IAC 2-7-2(a), has applied to Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM) for a Federally Enforceable State Operating Permit (FESOP).

SECTION D.5

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]: Insignificant Activities

- h) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6.
- j) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment.
- o) Quenching operations used with heat treating processes.
- z) Grinding and machining operations controller with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4,000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; and woodworking operations.
- aa) Various waterbased parts washers (approximately 59 individual units) are utilized throughout the facility. The individual potential to emit (PTE) for glycol ethers is approximately 0.1 pounds per day. The combined PTE for glycol ethers is approximately 5.2 pounds per day.
- dd) Lime silo (N-28), associated with the onsite WWTP.
- ff) Various water based parts washers, approximately 30 units (N-41), are used throughout the plant.
- gg) Forge/press shop QA/QC grinders (N-56 and N-57).
- hh) Plant grinder, a single, free-standing unit located on the plant floor (N-59).
- ii) Wet type machining operations.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.5.1 Volatile Organic Compounds (VOC)

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations), for cold cleaning operations constructed after January 1, 1980, the owner or operator shall:

- (a) Equip the cleaner with a cover;
- (b) Equip the cleaner with a facility for draining cleaned parts;
- (c) Close the degreaser cover whenever parts are not being handled in the cleaner;
- (d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
- (e) Provide a permanent, conspicuous label summarizing the operation requirements;
- (f) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste

solvent (by weight) can evaporate into the atmosphere.

D.5.2 Volatile Organic Compounds (VOC)

- (a) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaner degreaser facility construction of which commenced after July 1, 1990, shall ensure that the following control equipment requirements are met:
- (1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:
 - (A) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38EC) (one hundred degrees Fahrenheit (100EF));
 - (B) The solvent is agitated; or
 - (C) The solvent is heated.
 - (2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38EC) (one hundred degrees Fahrenheit (100EF)), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.
 - (3) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).
 - (4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.
 - (5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38EC) (one hundred degrees Fahrenheit (100EF)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9EC) (one hundred twenty degrees Fahrenheit (120EF)):
 - (A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.
 - (B) A water cover when solvent is used is insoluble in, and heavier than, water.
 - (C) Other systems of demonstrated equivalent control such as a refrigerated chiller or carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.
- (b) Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaning facility construction of which commenced after July 1, 1990, shall ensure that the following operating requirements are met:

- (1) Close the cover whenever articles are not being handled in the degreaser.
- (2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.
- (3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

D.5.3 Particulate Matter (PM) [326 IAC 6-3-2]

- (a) Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from the brazing, cutting, soldering, welding, quenching, grinding, machining operations as well as the loading and unloading of lime silo, N-28, shall not exceed allowable PM emission rate based on the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

or

Interpolation and extrapolation of the data for the process weight rate in excess of 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 55.0 P^{0.11} - 40 \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

- (b) Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from the 77 wet machines and the one (1) heat treat furnace shall not exceed allowable PM emission rate listed in the following table:

Facility	Process Weight Rate (tons/hour)	Allowable PM Emission Rate (pounds/hour)
77 Wet Machines	1.50 each	5.38 each
1 Heat Treat Furnace	1.50	5.38

Indiana Department of Environmental Management Office of Air Management

Technical Support Document (TSD) for a Minor Permit Revision to a Federally Enforceable State Operating Permit

Source Background and Description

Source Name:	DaimlerChrysler Corporation - New Castle Machining & Forge Plant
Source Location:	1817 "I" Avenue, New Castle, Indiana 47362
County:	Henry
SIC Code:	3714
Operation Permit No.:	F 065-5619-00001
Operation Permit Issuance Date:	December, 11, 1996
Minor Permit Revision No.:	MPR 065-12960-00001
Permit Reviewer:	Mark L. Kramer

The Office of Air Management (OAM) has reviewed a minor permit revision application from DaimlerChrysler Corporation relating to the construction, relocation, replacement and operation of the following emission units and pollution control devices:

- (a) Seventy-seven (77) wet machines, consisting of forty (40) wet machines at 1,000 actual cubic feet per minute and thirty-seven (37) wet machines at 2,000 actual cubic feet per minute, exhausted in the building, to be installed in 2001, capacity: 0.11 gallons of machining fluid per hour each, throughput capacity: 3,000 pounds of automotive parts per hour (deemed insignificant activities).
- (b) One (1) heat treat furnace (replacing a similar furnace), to be installed in 2001, exhaust to a stack, capacity: 0.147 gallons of oil per hour, throughput capacity: 3,000 pounds of automotive parts per hour (deemed insignificant activity).
- (c) Twenty-nine (29) parts washers, capacity: 0.2 gallons of washer fluids per hour, total (deemed insignificant activities).
- (d) Natural gas combustion units, each rated at less than ten (10) million British thermal units per hour, total rated at 23.6 million British thermal units per hour (deemed insignificant activities).

All these proposed types of insignificant activities are already listed in the FESOP as Condition A.3 (a), (o), (aa) and (ii).

In addition, the following existing facilities are being relocated within the source as minor physical changes as defined in 326 IAC 2-1.1-1(6) pursuant 326 IAC 2-1.1-3(g)(2):

- (e) Three (3) heat treat furnaces,
- (f) One (1) shot blast unit,

- (g) Four (4) atmosphere generators,
- (h) Four (4) laser welders,
- (i) Thirty-three (33) wet machines, and
- (j) Twenty (20) parts washers.

History

On November 16, 2000, DaimlerChrysler Corporation submitted an application to the OAM requesting to construct, operate, replace and relocate additional equipment to their existing plant. DaimlerChrysler Corporation was issued a Federally Enforceable State Operating Permit (FESOP) on December 11, 1996. The source was issued a Significant Permit Revision, SPR 065-11005 on October 7, 1999 and an Administrative Amendment, AAF 065-12797 on November 9, 2000.

On November 16, 2000, the source also submitted an application for an Interim Construction Permit for this proposed revision.

Enforcement Issue

There are no enforcement actions pending.

Stack Summary

At this time, the stack parameters for the parts washers and heat treat furnace are unknown:

Recommendation

The staff recommends to the Commissioner that the FESOP Minor Permit Revision be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on November 16, 2000.

Emission Calculations

See pages 1 through 3 of 3 of Appendix A of this document for detailed emissions calculations.

Potential To Emit of Revision

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U.S. EPA."

This table reflects the PTE before controls for this revision. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year)
PM	5.44
PM ₁₀	6.03
SO ₂	0.062
VOC	1.01
CO	8.68
NO _x	10.3

HAPs	Potential To Emit (tons/year)
Toluene	0.0004
Glycol Ether	0.438
Benzene	0.0002
Dichlorobenzene	0.0001
Formaldehyde	0.008
Hexane	0.186
Lead Compounds	0.00005
Cadmium Compounds	0.0001
Chromium Compounds	0.0001
Manganese Compounds	0.00004
Nickel Compounds	0.0002
TOTAL	0.633

Justification for Revision

The FESOP is being revised through a FESOP Minor Permit Revision. This revision is being performed pursuant to 326 IAC 326 IAC 2-8-11.1(d)(4)(A) and (C) since potential PM and PM₁₀ emissions from the proposed revision are greater than five (5) tons per year but less than twenty-five (25) tons per year and the potential NO_x emissions are greater than ten (10) tons per year but less than twenty-five (25) tons per year.

County Attainment Status

The source is located in Henry County.

Pollutant	Status
PM ₁₀	attainment
SO ₂	attainment
NO ₂	attainment
Ozone	attainment
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) and oxides of nitrogen (NO_x) are precursors for the formation of ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to the ozone standards. Henry County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO_x emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (b) Henry County has been classified as attainment or unclassifiable for all remaining criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (c) Fugitive Emissions

Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive PM emissions are not counted toward determination of PSD and Emission Offset applicability.

Source Status

Existing Source PSD or Emission Offset Definition (emissions after controls, based upon 8760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	Emissions (tons/year)
PM	65.4
PM ₁₀	65.4
SO ₂	35.8
VOC	37.3
CO	18.3
NO _x	73.0

- (a) This existing source is not a major stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not one of the 28 listed source categories.
- (b) These emissions are based upon SPR 065-11005, issued October 7, 1999.

Potential to Emit of Revision After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the significant emission units after controls. The control equipment is considered federally enforceable only after issuance of this FESOP revision.

	Potential to Emit (tons/year)						
Process/facility	PM	PM ₁₀	SO ₂	VOC	CO	NO _x	HAPs
Proposed Revision	5.44	6.03	0.062	1.01	8.68	10.3	0.625
PSD Threshold Level	250	250	250	250	250	250	-

This revision to an existing minor stationary source is not major because the emission increase is less than the PSD threshold levels. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply.

This revision to the existing FESOP will **not** change the status of the stationary source because the emissions from the entire source will still be limited to less than the Part 70 major source thresholds.

Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) applicable to this proposed revision.
- (b) The degreasing operation, deemed an insignificant activity, is not subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs), Subpart T (40 CFR 63.460-469) since no halogenated HAP solvents are used.

State Rule Applicability - Individual Facilities

326 IAC 2-4.1-1 (New source toxics control)

The potential single and combination HAPs emissions from this minor permit revision are 0.633 tons per year. Therefore, this revision is not major for HAPs and thus this rule does not apply.

326 IAC 6-3-2 (Process Operations)

Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from following facilities shall not exceed the listed emission rates in pounds per hour when operating at the indicated process weight rates determined by the appropriate equation:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour and
 P = process weight rate in tons per hour

Facility	Process Weight Rate (tons/hour)	Allowable PM Emission Rate (pounds/hour)	Potential PM Emission Rate (pounds/hour)
77 Wet Machines	1.50 each	5.38 each	0.067 each
1 Heat Treat Furnace	1.50	5.38	0.047

Therefore, each wet machine and the one (1) heat treat furnace complies with this rule.

326 IAC 8-3-2 (Cold Cleaner Operations)

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations) for cold cleaning operations constructed after January 1, 1980, the owner or operator will:

- (a) Equip the cleaner with a cover;
- (b) Equip the cleaner with a facility for draining cleaned parts;
- (c) Close the degreaser cover whenever parts are not being handled in the cleaner;
- (d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
- (e) Provide a permanent, conspicuous label summarizing the operation requirements;
- (f) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

326 IAC 8-3-5 (Organic Solvent Degreasing Operations: Cold Cleaner Degreaser Operation and Control)

- (a) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaner degreaser facility construction of which commenced after July 1, 1990, will ensure that the following control equipment requirements are met:
 - (1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:
 - (A) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38EC) (one hundred degrees Fahrenheit (100EF));
 - (B) The solvent is agitated; or
 - (C) The solvent is heated.
 - (2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38EC) (one hundred degrees Fahrenheit (100EF)), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.
 - (3) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).
 - (4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.
 - (5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) milli-

meters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38EC) (one hundred degrees Fahrenheit (100EF)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9EC) (one hundred twenty degrees Fahrenheit (120EF)):

- (A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.
 - (B) A water cover when solvent is used is insoluble in, and heavier than, water.
 - (C) Other systems of demonstrated equivalent control such as a refrigerated chiller or carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.
- (b) Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaning facility construction of which commenced after July 1, 1990, shall ensure that the following operating requirements are met:
- (1) Close the cover whenever articles are not being handled in the degreaser.
 - (2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.
 - (3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

Compliance Requirements

Permits issued under 326 IAC 2-8 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAM, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-8-4. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

There are no additional compliance monitoring requirements applicable to this revision.

Proposed Changes

The permit language is changed to read as follows (deleted language appears as ~~strikeouts~~, new language appears in **bold**):

A.3 Insignificant Activities

This stationary source also includes the following insignificant activities, as defined in 326 IAC 2-7-1(20):

- aa) Various waterbased parts washers (approximately ~~59~~ 30 individual units) are utilized throughout the facility. The individual potential to emit (PTE) for glycol ethers is approximately 0.1 pounds per day. The combined PTE for glycol ethers is approximately ~~5.2~~ 2.6 pounds per day.

SECTION D.5

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]: Insignificant Activities

- h) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6.
- j) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment.
- o) Quenching operations used with heat treating processes.
- z) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4,000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; and woodworking operations.
- aa) Various waterbased parts washers (approximately 59 individual units) are utilized throughout the facility. The individual potential to emit (PTE) for glycol ethers is approximately 0.1 pounds per day. The combined PTE for glycol ethers is approximately 5.2 pounds per day.
- dd) Lime silo (N-28), associated with the onsite WWTP.
- ff) Various water based parts washers, approximately 30 units (N-41), are used throughout the plant.
- gg) Forge/press shop QA/QC grinders (N-56 and N-57).
- hh) Plant grinder, a single, free-standing unit located on the plant floor (N-59).
- ii) Wet type machining operations.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.5.1 Volatile Organic Compounds (VOC)

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations), for cold cleaning operations constructed after January 1, 1980, the owner or operator shall:

- (a) Equip the cleaner with a cover;

- (b) Equip the cleaner with a facility for draining cleaned parts;
- (c) Close the degreaser cover whenever parts are not being handled in the cleaner;
- (d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
- (e) Provide a permanent, conspicuous label summarizing the operation requirements;
- (f) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

D.5.2 Volatile Organic Compounds (VOC)

- (a) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaner degreaser facility construction of which commenced after July 1, 1990, shall ensure that the following control equipment requirements are met:
 - (1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:
 - (A) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38EC) (one hundred degrees Fahrenheit (100EF));
 - (B) The solvent is agitated; or
 - (C) The solvent is heated.
 - (2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38EC) (one hundred degrees Fahrenheit (100EF)), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.
 - (3) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).
 - (4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.
 - (5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38EC) (one hundred degrees Fahrenheit (100EF)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9EC) (one hundred twenty degrees Fahrenheit (120EF)):

- (A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.
 - (B) A water cover when solvent is used is insoluble in, and heavier than, water.
 - (C) Other systems of demonstrated equivalent control such as a refrigerated chiller or carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.
- (b) Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaning facility construction of which commenced after July 1, 1990, shall ensure that the following operating requirements are met:
- (1) Close the cover whenever articles are not being handled in the degreaser.
 - (2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.
 - (3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

D.5.3 Particulate Matter (PM) [326 IAC 6-3-2]

- (a) Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from the brazing, cutting, soldering, welding, quenching, grinding, machining operations as well as the loading and unloading of lime silo, N-28, shall not exceed allowable PM emission rate based on the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

or

Interpolation and extrapolation of the data for the process weight rate in excess of 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 55.0 P^{0.11} - 40 \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

- (b) Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from the 77 wet machines and the one (1) heat treat furnace shall not exceed allowable PM emission rate listed in the following table:

Facility	Process Weight Rate (tons/hour)	Allowable PM Emission Rate (pounds/hour)
77 Wet Machines	1.50 each	5.38 each
1 Heat Treat Furnace	1.50	5.38

Conclusion

The construction of this proposed revision shall be subject to the conditions of the attached proposed FESOP Minor Permit Revision No. 065-12960-00001.

Company Name: DaimlerChrysler Corporation
Address City IN Zip: 1871 "I" Avenue, New Castle, Indiana 47362
Source Modification: MPR 065-12960
Pit ID: 065-00001
Reviewer: Mark L. Kramer
Date: November 16, 2000

77 Wet Machines

Machining Fluids	Max Usage per Machine (gal/hr)	Total Usage (gal/hr)	Density of Fluid (lbs/gal)	PM Emission Factor (%)	Total PM Emissions (lbs/hr)	Total PM Emissions (tons/yr)
	0.11	8.60	7.88	1.75%	1.19	5.19
Average VOC Content (%)	Max Usage per Machine (gal/hr)	Total Usage (gal/hr)	Density of Fluid (lbs/gal)	VOC Emission Factor (%)	Total VOC Emissions (lbs/hr)	Total VOC Emissions (tons/yr)
0.01%	0.11	8.60	7.88	25.00%	0.0017	0.0074

Heat Treat Furnace

Max Usage (gal/hr)	Density of Fluid (lbs/gal)	PM Emission Factor (%)	PM Emissions (lbs/hr)	PM Emissions (tons/yr)
0.15	7.17	1.00%	0.011	0.047

Note: PM emission factors are based on engineering estimate provided by applicant
 VOC emission factor is based on engineering estimate provided by applicant

Parts Washer**VOC = HAP (glycol ethers)****PN 122702770 contains 5% VOC**

VOC Content (%)	Maximum Usage (gal/hr)	Density of Fluid (lbs/gal)	VOC Emission Factor (%)	Total VOC Emissions (lbs/hr)	Total VOC Emissions (tons/yr)
5.00%	0.20	10.00	100.00%	0.1000	0.4380

Summary of Emissions (tons per year)
Potential Before and After Controls

	PM	PM10	VOC	SO2	NOx	CO	HAPs
77 Wet Machines	5.19	5.19	0.007	0.000	0.000	0.000	0.000
Heat Treat Furnace	0.047	0.047	0.000	0.000	0.000	0.000	0.000
Parts Washer	0.000	0.000	0.438	0.000	0.000	0.000	0.438
Natural Gas Combustion	0.196	0.786	0.569	0.062	10.3	8.68	0.195
Total	5.44	6.03	1.01	0.062	10.3	8.68	0.633

**Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
Small Industrial Boiler**

Company Name: DaimlerChrysler Corporation
Address City IN Zip: 1871 "I" Avenue, New Castle, Indiana 47362
Source Modification: MPR 065-12960
Pit ID: 065-00001
Reviewer: Mark L. Kramer
Date: November 16, 2000

**Natural Gas Combustion Units
Insignificant Activities**

Heat Input Capacity
MMBtu/hr

Potential Throughput
MMCF/yr

23.60

206.74

Pollutant						
Emission Factor in lb/MMCF	PM*	PM10*	SO2	NOx	VOC	CO
	1.9	7.6	0.6	100.0	5.5	84.0
	**see below					
Potential Emission in tons/yr	0.196	0.786	0.062	10.337	0.569	8.683

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

See page 3 for HAPs emissions calculations.

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
Small Industrial Boiler
HAPs Emissions

Page 3 of 3 TSD App A

Company Name: DaimlerChrysler Corporation
Address City IN Zip: 1871 "I" Avenue, New Castle, Indiana 47362
Source Modification: MPR 065-12960
Plt ID: 065-00001
Reviewer: Mark L. Kramer
Date: November 16, 2000

HAPs - Organics

Emission Factor in lb/MMcf	Benzene 2.1E-03	Dichlorobenzene 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03
Potential Emission in tons/yr	2.171E-04	1.240E-04	7.753E-03	1.861E-01	3.515E-04

HAPs - Metals

Emission Factor in lb/MMcf	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03
Potential Emission in tons/yr	5.168E-05	1.137E-04	1.447E-04	3.928E-05	2.171E-04

Methodology is the same as page 2.

The five highest organic and metal HAPs emission factors are provided above.
 Additional HAPs emission factors are available in AP-42, Chapter 1.4.